

Is the jet plane 1,000 years old

IN THE vaults of the State Bank in Bogota, capital of Colombia, lies a 1½-in-long object of solid gold made by South American Indians at least 1,000 years ago.

For centuries it was regarded as a religious ornament. Now, however, a team of American aeronautical experts have come up with an astonishing theory: It's an uncanny replica of the latest rear-engined vertical take-off jet.

Could it be that someone in remote South America 1,000 years ago dreamed up something that 20th century science has only just perfected?

No-one yet knows. So the golden jet-plane has joined the long list of what the experts are calling OOPARTS — out of place artifacts — major developments in chemistry, electronics and aeronautics which were apparently dreamed up by civilisations centuries ago.

In 1936, for example, archaeologists unearthed a strange object from the ruins of a village near Baghdad.

It was a clay jar, containing a cylinder of sheet copper with an iron rod suspended in its centre. Since then, similar objects have been found at other sites in Iraq.

The original jar and its contents were put on display in the Cairo Museum. On several occasions, people who saw it remarked that it looked just like an electric cell.

But no-one tried to prove it until recently, when a team of German scientists built an exact replica and, as an acid substitute, filled it with grape juice.

There was no longer any doubt that it was a primitive battery, for it produced an electric current of up to 2 volts in strength!

The original battery was probably 2,000 years old. So who obtained the knowledge to build it — and for what purpose was it used?

No-one can yet answer



the first question. But the German experts think they might have the answer to the second.

In an experiment, they immersed a small silver statue in a gold cyanide solution and passed an electric current from their model battery through it.

In just a couple of hours, the process had given the statue a thin layer of gold. The inference is that ancient goldsmiths used electric current to electro-plate their valuables.

Another mysterious object was a strange mechanism found in the wreck of a Greek merchant ship that sank in the Aegean about 80 BC.

Made of bronze and encased in wood, it split into four fragments when it dried out, and the inner surfaces of these fragments were found to contain small, delicate wheels.

Recently, scientists at America's Yale University took a series of gamma- and X-radiographs of the strange object, and these showed internal details which had not been seen before.

It appeared that the object was a miniature planetarium, using some 30 gears of various sizes and employing a differential gear system which allowed

two shafts to rotate at different speeds.

It was to be 1,000 years after that Greek ship went down before differential gears were "invented" by the Western world.

Other scientists have just discovered that strange markings, carved on bone tools found throughout Europe, represent the phases of the moon — not just as they were when primitive man observed them, but as they would be when the seasons changed.

Those bone tools are 30,000 years old — which has led to a drastic rethink about when man first began to observe the heavens.

Then there's the case of the "Saqqara Bird" — a wooden object about 5½ in long, discovered among the contents of an Egyptian tomb in 1891 and dated at 200 BC.

Recently, aero-engineers have carried out a series of tests on it — and reached the conclusion that whoever built it must have had a considerable knowledge of aeronautics.

The object's wings and fuselage show aerodynamic characteristics and refinements. And it flies, too — just like a model glider.

Now experts are asking: If the ancient Egyptians had the knowledge to build a model glider, why didn't

they progress to build a full-size flying machine?

The answer is that they might have done. For most of the knowledge of the ancient world was stored in the famous library of Alexandria, and lost for ever when this was burned down by the Romans in 391 AD, and its priceless manuscript collection was wiped out.

Scientists now believe that the lost knowledge may have held the answer to another classic puzzle — how huge blocks of stone were moved hundreds of miles to build great monuments.

Recent scientific investigation has shown that the molecular structure of some stones had been altered, leading to the theory that ancient civilisations may have known how to liquify them by chemical means, turning them into a kind of plastic for ease of transportation and then reconstituting them in moulds at the building site.

Far-fetched? Not entirely. The Huanka Indians of Bolivia still make stone objects by liquifying rock with oxalic acid.

And for civilisations which had apparently discovered the mysteries of electricity, aeronautics and astronomy, while modern man was still living in caves, a bit of molecular chemistry would surely be child's play!

Did a South American Indian have an astonishing preview of the future 1,000 years ago? His sneak preview of the jet plane has joined the ever-increasing list of developments that seem to have first been dreamed up centuries later.